# APPENDIX D

Chapter 15 Information

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# APPENDIX D

## Discharges to Land Exemptions

California Code of Regulations, Title 23, Chapter 15

The following activities shall be exempt from the provisions of subchapter 4.5

Exemptions:

a) Discharges of domestic sewage or treated effluent which are regulated by waste discharge requirements issued pursuant to Subchapter 9 of this chapter, or for which waste discharge requirements have been waived, and which are consistent with applicable water quality objectives, and treatment or storage facilities associated with municipal waste water treatment plants, provided that residual sludges or solid waste from waste water treatment facilities shall be discharged only in accordance with the applicable provisions of this subchapter.

b) Discharges of waste water to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if the following conditions are met:

    1) The applicable regional board has issued waste discharge requirements, reclamation requirements, or waived such issuance.
    2) The discharge is in compliance with the water quality objectives, set forth in the applicable water quality control plan and complies with the State Board's non degradation policy.
    3) The waste water does not need to be managed according to Chapter 30 of Division 4 of Title 22 of this code as a hazardous waste.

If ground water quality objectives are lacking in the applicable water quality control plan, a ground water quality evaluation on based on the ground water monitoring provisions of Article 5 of this subchapter shall be conducted by the discharger to determine if the proposed discharge would comply with the State Board's nondegradation policy.

c) Discharges of waste to wells by injection pursuant to the Underground Injection Control Program established by the United States Environmental Protection Agency (EPA) under the Safe Drinking Water Act (42 U. S. Code Section 300h, see Title 40 of the Code of Federal Regulations, Parts 144 to 146).

d) Actions taken by or at the direction of public agencies to clean up or abate conditions of pollution or nuisance resulting from unintentional or unauthorized releases of waste or pollutants to the environment; provided that wastes, pollutants, or contaminated materials removed from the immediate place of release shall be discharged according to Article 2 of this subchapter; and further provided that remedial actions intended to contain such wastes at the place of release shall implement applicable provisions of this subchapter to the extent feasible.

e) Discharges of condensate from methane gas recovery operations at classified waste management units if the following conditions are met:

    1) Condensate shall have no chemical additives which could adversely affect containment features, and shall consist only of water and liquid contaminants removed from gas recovered at a waste management unit.
    2) Condensate shall be discharged to a different landfill waste management unit with a leachate collection and removal system operated under waste discharge requirements issued by the regional board, or returned to waste management unit(s) from which it came.
    3) The discharger shall submit a report of waste discharge to the regional board pursuant to Subchapter 9 of this chapter, and shall discharge condensate only in compliance with waste discharge requirements.

f) Use of nonhazardous decomposable waste as a s il amendment pursuant to applicable best management practices, provided that regional boards may issue waste discharge or reclamation requirements for such use.

g) Discharges of drilling mud and cuttings from well-drilling operations, provided that such discharges are to on-site sumps and do not contain halogenated solvents. At the end of drilling operations, the discharger shall either:

   1) remove all wastes from the sump, or
   2) remove all free liquid from the sump and cover residual solid and semisolid wastes, provided that representative sampling of the sump contents after liquid removal shows residual solid wastes to be nonhazardous. If the sump has appropriate containment features, it may be reused.

h) Recycling or other use of materials salvaged from waste, or produced by waste treatment, such as scrap metal, compost, and recycled chemicals, provided that discharges of residual wastes from recycling or treatment operations to land shall be according to applicable provisions of this subchapter.

i) Waste treatment in fully enclosed facilities, such as tanks, or in concrete-lined facilities of limited areal extent, such as oil-water separators designed, constructed, and operated according to American Petroleum Institute Specifications.

**Hazardous Waste**

a) Hazardous waste is any waste which, under Section 66300 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4 of Title 22 of this code.

b) Hazardous wastes shall be discharged only at class I waste management units which comply with the applicable provisions of this subchapter and Chapter 30 of Division 4 of Title 22 of this code unless wastes qualify for a variance under Section 66310 of Title 22 of this code.

c) Wastes which have been designated as restricted wastes by DHS pursuant to Section 66900 of Title 22 of this code shall not be discharged to waste management units after the restriction dates established by Section 66905 of Title 22 of this code unless:

   1) such discharge is for retrievable storage, and
   2) DHS has determined that processes to treat or recycle substantially all of the waste are not available, or
   3) DHS has granted a variance from restrictions against land disposal of the waste under Section 66930 of Title 22 of this code.

**Designated Waste**

a) nonhazardous waste which consists of or contains pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state.

b) "manageable" hazardous waste which has been granted a variance from hazardous waste management requirements pursuant to Section 66310 of Title 22 of this code.

c) Wastes in this category shall be discharged only at Class I waste management units or at Class II waste management units which comply with the applicable provisions of this subchapter and have been approved for containment of particular kind of waste to be discharged. Decomposable wastes in this category may be discharged to Class I or II land treatment units.

**Nonhazardous Solid Waste**

a) Nonhazardous solid waste means all putrescible and nonputrescible solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances,

manure, vegetable or animal solid and semi-solid wastes and other discarded solid or semi-solid waste; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated waste).

b) Except as provided in Subsection 2520(d) of this article, nonhazardous solid waste may be discharged at any classified landfill which is authorized to accept such waste, provided that:

   1) the discharger shall demonstrate that codisposal of nonhazardous solid waste with other waste shall not create conditions which could impair the integrity of containment features and shall not render designated waste hazardous (e.g., by mobilizing hazardous constituents);
   2) a periodic load-checking program approved by DHS and the regional board shall be implemented to ensure that hazardous materials are not discharged at Class III landfills.

c) Dewatered sewage or water treatment sludge may be discharged at a Class III landfill under the following conditions, unless DHS determines that the waste must be managed as hazardous waste:

   1) The landfill is equipped with a leachate collection and removal system;
   2) The sludge contains at least 20 percent solids if primary sludge, or at least 15 percent solids if secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge; and
   3) A minimum solids-to-liquid ratio of 5:1 by weight shall be maintained to ensure that the codisposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste. The actual ratio required by the regional board shall be based on site-specific conditions.

d) Incinerator ash may be discharged at a Class III landfill unless DHS determines that the waste must be managed as hazardous waste.

**Inert Waste**

a) Inert waste does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste.

b) Inert wastes do not need to be discharged at classified waste management units.

c) Regional boards may prescribe individual or general waste discharge requirements for discharges of inert wastes.

**APPENDIX D**
Strategies for Discharge of Waste to Land [1]

| Waste Category [2,3] | Waste Management Strategy | Waste Management Unit | | Primary Containment [4] | Siting and Geologic Criteria [5] |
|---|---|---|---|---|---|
| | | Class | Type | | |
| Liquid Hazardous [6] | Full Containment | I | Surface Impoundment | Double Liners [7,8] | a) Natural features capable of containing waste and leachate as backup to primary containment.<br><br>b) Not located in areas of unacceptable risk from geologic or environmental hazards. |
| Solid Hazardous [6] | | | Landfill | Double Liners [7,8] | |
| Dry Solid Hazardous[6] | | | Waste Pile | Double Liners [7,8,9] | |
| Liquid Designated (including undewatered sludge and acceptable incinerator ash) | Full Containment | II | Surface Impoundment | Double Liners [8,10] | a ) Natural features capable of containing waste and leachate may satisfy primary containment requirements.<br><br>b) May be located in most areas except high risk areas. |
| Solid Designated | | | Landfill | Single Liner [11,12] | |
| Dry Solid Designated | | | Waste Pile | | |
| Nonhazardous Solid Waste (including dewatered sludge and acceptable incinerator ash) | Protect Beneficial Uses | III | Landfill | None[13] | a) Consideration of factors listed in Subsection 2533(b)[13.]<br><br>b) May be located in most areas except high risk areas. |

1 See Sec. 2510 for applicability to existing facilities
2 Waste in any category may be discharged at waste management units with higher levels of containment ability.
3 Wastes suitable for land treatment in any category may be discharged at land treatment facilities.
4 See Article 4 of this subchapter.
5 See article 3 of this subchapter.
6 "Manageable" hazardous wastes may be discharged at Class II waste management units, see Sec. 2522(a)(2).
7 Hazardous waste facility standards per 22 CAC 66630 et. seq.
8 Leachate collection and removal system (LCRS) required.
9 Single liner may be acceptable, See Table 4.1.
10 Suitable natural features may satisfy requirements for outer liner where double liners are needed. Single replaceable clay liner (no LCRS) also acceptable.
11 Suitable natural features may satisfy primary containment requirement.
12 LCRS required as appropriate.
13 Units at sites not meeting siting and geologic criteria must have a single liner and LCRS.

## APPENDIX D
Geologic and Siting Criteria for Classified Waste Management Units

| Waste Management Unit Classification | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Chara-teristics | New Class I | Reclassification of Existing Class I[1] | | | | | | New Class II | Reclassification of Existing Class II[2] | New Class III | Reclassification of Existing Class II-2[3] |
| Geologic Setting | Maximum attainable isolation from ground water: substantial thickness, perme-ability less than or equal to $1x10^{-7}$cm/sec. | I | I[1] | II-1 | T/S | REC | EX | Substatntial isolation from ground water; substantial thickness, permeability less than or equal to $1x10^{-6}$cm/sec (or liner system). | As for new Class II. | Adequate separation from ground water; characteristics other than permeability will be considered. | As for new Class III. |
| | | Yes | Yes | Yes | Yes | Yes | Yes | | | | |
| Flooding | Outside of 100-year floodplain.[4] | Yes | No[5] | No[5] | No[5] | No[5] | No[5] | No siting restriction[5] | | | |
| Ground Rupture | 200' setback from known Holocene fault. | Yes | Yes | No[5] | No[5] | Yes | Yes | 200' setback from known Holocene fault. | Exempt[5], except that expansions are as for new Class II. | Not located on known Holocene fault. | Exempt[5], except that expansions as new Class III. |
| Rapid Geologic Change | Outside subject area (potential to impair containment).[4] | Yes | No[5] | No[5] | No[5] | No[5] | Yes | No siting restriction[5] | | | |
| Tidal waves[6] | Outside subject coastal areas[4] | No siting restriction[5] | | | | | | | No siting restriction | | |

1 This category is defined in Subsection 2531(a) of this article.

2 This category is defined in Subsection 2532(a) of this article.

3 This category is defined in Subsection 2532(a) of this article.

4 Waste management units used only for treatment and storage may be located within pr prescribed areas, provided that exemption from applicable siting criteria is conditioned on protection of treatment and storage from the geologic or environmental hazards involved.

5 Exemption from siting criteria does not release dischargers from the obligation to protect waste management units from the geologic or environmental hazards involved. Exemption is conditioned on such protection.

6 "Tidal waves" includes tsunamis, seiches, and surge condition.